

REMARKS

Reconsideration of the pending application is respectfully requested on the basis of the following particulars:

In the specification

The specification has been amended to clarify the description of the orientation of a notch portion for connecting and fixing the shield line as shown in at least Figs. 2 and 4A-4C. It is respectfully submitted that the structure of the amended description is clearly shown in the figures, and therefore no new matter is added.

Rejection of claims 1-5 under 35 U.S.C. § 103(a)

Claims 1-5 presently stand rejected as being unpatentable over Admitted Prior Art figures 11 and 12 (APA) in view of Frei et al (U.S. 2,563,713). This rejection is respectfully traversed for the following reasons.

Claim 1 has been amended to more clearly describe the present invention, by clarifying the orientation of the notch formed in the solder portion of the press-fitting pins. Claim 1 recites that the notch portion faces an axial insertion path of a conductive line. It is respectfully noted that this aspect of the notch portion is clearly seen in 2-10, and therefore does not constitute “new matter.”

It is respectfully submitted that neither APA nor Frei show the claimed notches facing an axial insertion path of a conductive line.

As noted in response to the previous Official Action, APA figs. 11 and 12 show, instead of notches, “inserting holes” 53 and 63 into which the signal and shield lines are bent, as best illustrated in Fig. 12, so that conductive lines extend out of the plane of the press-fitting pins. Thus, the claimed invention differs from that of the Admitted Prior Art in at least three positively recited respects:

- The conductive lines do not extend into notches (instead, they are bent to fit through holes);

- The conductive lines do not extend straight into the notches (as opposed to being bent); and
- The conductive lines and pins are not coplanar (instead, the conductive lines of Figs. 11 and 12 must be bent out of the plane of the pins in order to extend through the holes).

Frei shows pins that have a “well” 25, 31 formed alongside one end of the pins. With reference particularly to Figs. 3 and 4, it can be seen that these wells face a side portion of the pins and thus must be construed as facing sideways relative to the pin, and relative to an axial insertion path of a connector placed within the wells, but not facing an axial insertion path or direction of a conductive line to be inserted into the wells.

These differences are not merely a matter of design choice, but have to do with the fact that the claimed invention is concerned with minimizing the size of a mold body that buries two press-fitting pins connected to a single cable, and in particular with the problem of fitting two solder terminations into a molded body of reduced width. While such an arrangement is useful in a connector for a single-wire cable (as seen in Fig. 6), the arrangement of Fig. 2, employing a shielded coaxial wire highlights the significance of the notches facing the insertion direction of the conductive line.

It can be appreciated that the notch configuration of the present invention facilitates gripping the conductive line, a feature that is not apparent from the open-sided structure of the wells of Frei’s pins.

It must be further appreciated that, as noted in the present application, the present invention is directed toward a highly miniaturized cable terminal. Referring to the last paragraph of page 8, it is noted that it is desirable to restrict the length of projection (or exposure) of the shield line and a signal line protruding from a shielded cable to 2-4mm, to reduce change in impedance of the cable. Further, it is noted in the first paragraph of page 14 that the thickness of the mold body can be restricted to about 1mm. Thus, given the degree of miniaturization characteristic of the present invention, it is respectfully submitted that a person of ordinary skill in the art would not turn to the teachings of Frei

Conclusion

Every effort has been made to place the application fully in condition for allowance, and to remove all issues raised by the Examiner in the Official Action.

In view of the amendments to the claims, and in further view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Accordingly, it is requested that claims 1-5 be allowed and the application be passed to issue.

If any issues remain that may be resolved by a telephone or facsimile communication with the Applicant's attorney, the Examiner is invited to contact the undersigned at the numbers shown.

Respectfully submitted,

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